

[0028] CLAIMS

1. A signal processing system comprising:

means for providing a first signal intrinsic to an integrated circuit;

means for providing a first operational function to the first signal, said function

5 being provided at a pin of the integrated circuit,

means for providing a second operational function to the first signal by the integrated circuit, and

means for coupling a second signal extrinsic of the integrated circuit to the pin of the integrated circuit so that the means for providing the second operational function

10 operates on the second signal.

2. The signal processor of claim 1 wherein the first and second signals are analog audio signals.

3. The signal processing system of claim 1 wherein the first operational function is de-emphasis and the second operational function is a variable attenuator.

4. The signal processing system of claim 1 wherein the second signal is switchable "in" and "out", and when switched "in", the first signal is switched "off".

5 The signal processing system of claim 1 wherein the pin serves as a bi-directional conduit for signals.

6. A signal processing system comprising:

means for providing a first operational function to a first signal at a pin of an integrated circuit, the first signal being intrinsic to the integrated circuit, and

means for coupling a second signal extrinsic of the integrated circuit to the pin of the integrated circuit so that a means within the integrated circuit for providing a second operational function operates on the second signal.

7. The signal processor of claim 6 wherein the first and second signals are analog audio signals.

8. The signal processing system of claim 6 wherein the first operational function is de-emphasis and the second operational function is a variable attenuator.

9. The signal processing system of claim 6 wherein the second signal is switched "in" and "out" at the pin, and when switched "in" the first signal is disabled at the pin.

5 10 The signal processing system of claim 6 wherein the pin serves as a bi-directional conduit for signals.

11. A signal processing system comprising:

means for providing an operational function to a first signal at a pin of an
10 integrated circuit, the first signal being intrinsic to the integrated circuit, and

means for coupling a second signal extrinsic of the integrated circuit to the pin of the integrated circuit,

the coupling of the second signal to the pin switching "off" the presence of the first signal at the pin.

15 12. The signal processor of claim 11 wherein the first and second signals are analog audio signals.

13. The signal processing system of claim 11 wherein the first operational
20 function is de-emphasis.

14 The signal processing system of claim 11 wherein the pin serves as a bi-directional conduit for signals.

25 15. A signal processing system comprising:

means for providing a first signal intrinsic to an integrated circuit;

means for providing a first operational function to the first signal at a pin of the integrated circuit,

means for providing a second operational function to the first signal by the
30 integrated circuit, and

means for coupling a second signal extrinsic of the integrated circuit to the pin of the integrated circuit so that the means for providing the second operational function operates on the second signal,

the second signal being switchable "in" and "out", and when switched "in" the
35 first signal is switched "off" at the pin.

16 The signal processing system of claim 15 wherein the pin serves as a bi-directional conduit for signals.

17. A signal processing system comprising:

5 means for providing a first signal intrinsic to an integrated circuit;

means for providing a first operational function to the first signal at a pin of the integrated circuit,

means for providing a second operational function for the first signal by the integrated circuit, and

10 means for coupling a second signal extrinsic of the integrated circuit at the pin so that the means for providing the second operational function operates on the second signal,

the pin serving as a bi-directional conduit for signals,

the second signal being switchable "in" and "out", and when switched "in", the

15 first signal is switched "off" at the pin.

18. A circuit for switchably coupling a signal comprising:

first and second transistors each having respective base/gate electrode, emitter/source and collector/drain electrodes, the two transistors being of the same conductivity type and connected in series between a voltage supply and a reference
20 point,

in a signal coupling mode, the signal output coupling being from the first emitter/source electrode, the second collector/drain electrode being coupled to the first emitter/source electrode through a resistor, and

the first base/gate having bias means and receiving the input signal with the bias
25 means placing the first transistor in a linear signal transmission state, and the output signal being coupled out by the first emitter/source, the bias means also biasing the second base/gate electrode so that the second transistor is in a saturated state,

the circuit being switchable from the signal coupling mode to a non-signal coupling mode by the bias means placing the first transistor in a cutoff state so that the
30 first transistor is rendered non-coupling for the signal, the bias means also placing the second transistor in a cutoff state so that via action of the second collector/drain electrode, the first emitter/source electrode is switched to be at a high impedance with respect to the reference point thus removing impedance loading by the first emitter/source electrode.